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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,834	06/20/2001	John F. Lane	10821/51085	4115
29934	7590	07/01/2005	EXAMINER	
PALMER & DODGE, LLP RICHARD B. SMITH 111 HUNTINGTON AVENUE BOSTON, MA 02199				CORRIELUS, JEAN M
ART UNIT		PAPER NUMBER		
		2162		

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	09/885,834	Applicant(s)	LANE ET AL.
Examiner	Jean M Corrielus	Art Unit	2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 14 April 2005.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 and 10-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-4 and 10-22 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/14/05.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed on April 14, 2005, in which claims 1-4 and 10-22 are presented for further examination.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4 and 10-22 have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

3. The information disclosure statement (IDS) filed on March 26, 2004, April 8, 2004 and April 14, 2005 complies with the provisions of M.P.E.P 609. It has been placed in the application file. The information referred to therein has been considered as to the merits.

Specification

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

5. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), “Sequence Listings” (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A “MICROFICHE APPENDIX” (See MPEP § 608.05(a). “Microfiche Appendices” were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825.

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A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

6. The disclosure is objected to because of the following informalities: there is no detailed description of fig.2 in the detailed specification of the invention.

Appropriate correction is required.

Drawings

7. The drawings are objected to because there are no Fig.3A, Fig.3B, F.4A and Fig.4B in the brief description of the drawings and also there is no heading of brief description of the drawings. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

8. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

10. Claims 1-4 and 10-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claims 1-4 and 10-22 in view of **MPEP section 2106 IV.B.2. (b)** define non-statutory processes because they merely manipulate an abstract idea without a claimed limitation to a practical application. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Data structure not claimed as

embodied in computer-readable media is descriptive material per SE and is not statutory because they are neither physical nor statutory processes. Structural and functional interrelationship with a general-purpose computer for permitting claimed functions to be realized are not provided in the claims. In contrast, a claimed system should define structural and functional interrelationships between data structures or functional parts and a computer system which permit the data functions to be realized, and is statutory. Thus, the claimed are rejected as being non-statutory. Additionally, the invention, as claimed, is directed to the manipulation of an abstract idea with no practical application in the technology arts.

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of itself is not patentable". Rubber-Tip Pencil Co. V. Howard, 20 wall. 498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basis tools of scientific and technological work Gottschalk V. Benson, 175 USPQ 673, 675 (S Ct 1972). It is a common place that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter Parker V. Flook, 197 USPQ 193, 201 (S Ct 1978). A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Wamerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

Claim 1 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from one state to another being performed in "An apparatus for viewing at last one intelligent design" in claim 1. Actually, no post computer process activity is found in the technological arts. An apparatus for viewing at last one intelligent design is not a physical transformation. Thus, no

physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 1 is not **tangibly embodied** in a manner so as to **be executable** as the only hardware is in an intended use statement. Claim 1 is only a software program is loaded to a computer. Therefore, claim 1 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

As to claims 2-4 and 10-13:

The dependent claims 2-4 and 10-13 are rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claims 2-4 and 10-13 are merely abstract idea and are being processed without any links to a practical result in the technology arts and without computer manipulation. They are not **tangibly embodied** in a manner so **as to be executable** as the only hardware is in an intended use statement.

Claim 14 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from

one state to another being performed in “An apparatus for storing properties and functional characteristics of an intelligent design” in claim 14. Actually, no post computer process activity is found in the technological arts. An apparatus for storing properties and functional characteristics of an intelligent design is not a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 14 is not **tangibly embodied** in a manner so as to **be executable** as the only hardware is in an intended use statement. Claim 14 is only a software program is loaded to a computer. Therefore, claim 14 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

As to claims 15-21:

The dependent claims 15-21 are rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claims 15-21 are merely abstract idea and are being processed without any links to a practical result in the technology arts and without

computer manipulation. They are not **tangibly embodied** in a manner so as to be executable as the only hardware is in an intended use statement.

Claim 22 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from one state to another being performed in “A computer readable medium” in claim 22. Actually, no post computer process activity is found in the technological arts. A computer readable medium is not a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 22 is not **tangibly embodied** in a manner so as to be executable as the only hardware is in an intended use statement. Claim 22 is only a software program is loaded to a computer. Therefore, claim 22 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result being executed by a general-purpose computer in order to correct the above indicated deficiencies.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-4 and 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Huben et al., (hereinafter “Van”) US Patent no. 5,920,873 and Heile et al., (hereinafter “Heile) US Patent no. 5,983,277.

As to claims 1, 14 and 22, Van disclose a design control system usable in a concurrent engineering process to enable the design to be processed. In particular Van discloses the claimed “a library of format readers for reading at least one intelligent design saved in a specific format” by creating a model by interactive user activity (col.12, lines 65-66; col.100, lines 45-57); “a format verifier linked to the format readers for matching the intelligent design to one of the format readers capable of reading the specific format” automatically creating a data structure type for each data design (col.15, lines 10-22; col.19, lines 5-24; col.20, lines 17-18); “an import application-programming interface linked to the format verifier for importing the intelligent design in the applicable format for viewing the intelligent design”importing a located file by use of an application program interface with a collection of model management utilities (col.7, lines 24-28; col.12, line 66-col.13, line 11); and “a memory resident data model, linked to the import application-provamming interface, is a database for storing the properties and functional characteristics of the intelligent design” (col.13, lines 12-16). However, Van does not explicitly disclose whether the apparatus is configured as a single application. On the other hand, Heile

discloses an analogous system that allows multiple engineer to collaborate on one design project (col.3, lines 1-10). More specifically, Heile provides the design engineers the use of a single application to enter the project design when it has been developed (col.5, lines 23-30; col.6, lines 23-35; col.8, lines 55-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of the cited references, wherein the design control system library provided therein (see Van.fig.5) would incorporate the use of a single application. One having ordinary skill in the art would have found it motivated to use such a combination in order to ensure a matching set of design data traverse through the library.

As to claims 2 and 15, Van discloses the claimed “a query application-programming interface, linked to the memory resident data model, for searching for at least one element in the memory resident data model” (col.12, lines 55-66); and “a user interface, linked to the query application-programming interface, for interactively accessing the memory resident data model” (col.7, lines 22-28).

As to claims 3 and 16, Van discloses the claimed “at least one format writer, linked to the query application- programming interface, for controlling a local configuration and behavior of the user interface” (col.7, lines 22-30; col.15, lines 10-28).

As to claims 4 and 17, Heile discloses the claimed “a collaborative network element, linked by at least one medium to the memory resident data model, for using the apparatus across a global computer network” (col.3, lines 1-8; col.8, lines 20-24, lines 55-66).

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As to claims 10 and 18, Heile discloses the claimed “wherein the memory resident data model stores a plurality of intelligent designs” (col.8, lines 30-34).

As to claims 11 and 19, Heile discloses the claimed “wherein the plurality of intelligent designs have different application formats” (col.6, lines 25-36).

As to claims 12 and 20, Heile discloses the claimed “wherein the memory resident data model stores the plurality of intelligent designs in a format that allows simultaneous viewing” (col.5, lines 25-53; col.6, lines 22-55; col.7, lines 23-32; col.17, lines 6-17; lines 30-40).

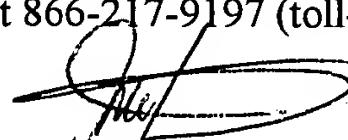
As to claims 13 and 21, Heile discloses the claimed “wherein the memory resident data model provides connectivity between analogous device elements in the plurality of intelligent designs” (col.7, lines 23-33).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean M Corrielus
Primary Examiner
Art Unit 2162

June 17, 2005